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Phoenix OS/2 Society

The magazine of the OS/2 community

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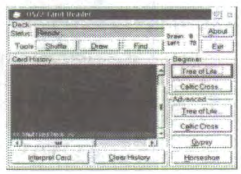

Society news

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Stealth marketing raised to an art

by Bill Schindler, Editor-in-chief

.comment

I have in hand a copy of Visual Age C++ 4.0 for OS/2. All right, be honest. Did you know that VA C++ 4.0 had been released?

Maybe you knew that a new C++ for OS/2 was supposed to be released Real Soon Now, but did you see an announcement? No?

We couldn't remember seeing an announcement, either. So we asked IBM's PR folks and got... A press release from June saying VA C++ 4.0 would be released during the summer '98. The press release doesn't mention operating systems, so our online searches for "OS/2" and "Warp" missed it.

VA C++ 4.0 was actually released December 20, 1998. (Hey, it's summer in the southern hemisphere!) And the only "announcement" made to the press was to send a CD-ROM and a copy of the license agreement—and that only after being repeatedly nagged.

So what?

If you've watched IBM for more than six months, you know that releasing a product unannounced is *de rigeur* for IBM. Forgetting to announce the actual release of VA C++ 4.0 is a big "so what?"

Okay, but how about a product that supposedly shipped, was never announced, and apparently never actually shipped?

The VA C++ 4.0 installation instructions repeatedly refer to installing over version 3.6. There's an off-hand reference to version 3.0—like it's an old version that hardly anyone is still using.

Uh, version 3.6? There's no mention on IBM's Web sites of a version 3.6. The latest version for OS/2 mentioned is 3.0. There's no FixPaks for 3.6, no part number that I could find, no anything. IBM press relations never heard of a version 3.6 for OS/2.

It's a typo, right? Wrong. According to one of the people at IBM who worked on the compiler, the compiler group did ship VA C++ 3.6 for OS/2.

Oops.

Not only was there no press release, there was no product release. Stealth marketing *and* a stealth product. Somehow, the concept of "customer" completely slipped everybody's mind.

Perhaps IBM was hoping that two large negatives would add up to a positive.

Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an international organization of computer users with an interest in IBM's OS/2 operating system and related issues.

BMT Micro and Falcon Networking merge

press release

BMT Micro, Inc., a leading software reseller, announced today that it has entered into an agreement and plan of merger with Falcon Networking, Inc, a Florida based internet service provider with interests in Web based publishing and design, programming, and networking services.

Under the terms of the merger, Falcon Networking will move operations to Wilmington, NC. The details of the merger were resolved over a period of months and have been approved by the principles of both companies. The merger and relocation of Falcon Networking is anticipated to be complete by December 31, 1998 and is currently underway.

"This merger will allow both companies to greatly enhance their core services and at the same time form a creative environment that will immediately benefit our customers and clients," says Thomas Bradford, President of BMT Micro. 1998 has been a year of dramatic growth for BMT Micro due to the diversification of our product mix and the enhancements we've made to our services. Falcon Networking and BMT Micro have worked closely together for two years and bringing the companies together will allow our resources and talent to be used most effectively."

"As our two companies worked together on various projects over the last couple of years, it became clear that that the talents embodied in the staffs of the two companies meshed in a way that would benefit from an even closer relationship," said Dirk Terrell, President of Falcon Networking. "By bringing our people together, both companies will grow in ways not possible as separate entities. This merger will allow us to provide even better service to our customers."

BMT Micro, founded in 1992, is a privately held software reseller located in Wilmington, NC and has the distinction of being a pioneer in electronic commerce.

Falcon Networking, Inc., founded in 1996, is a Florida-based internet service provider specializing in Web publishing.

OS/2 application in SharewareJunkies Awards

press release

SharewareJunkies.com, the online shareware distribution site, announced its 1999 top software awards. Longtime favorite Windows clipboard utility ClipMate won top honors, but the #3 spot is held by an OS/2 program.

The awards are voted annually by users at the SharewareJunkies.com site during November and December. The awards carry special significance for shareware authors since they reflect the opinions of program users, not of marketers, publicists, or even other program authors. They've been called an online version of the entertainment industry's "People's Choice" awards.

ClipMate, a utility that enhances the Windows clipboard in dozens of ways, took double honors, once as Best Program of the Year and again as Best Windows Program. The Best Program award goes annually to the program that receives the highest total number of votes.

Second highest number of votes this year went to DragThing, which won in the category of Best Macintosh Program. Third highest in votes was Command AntiVirus as best OS/2 program, while NoteTab got fourth place in overall votes and the Best Freeware program.

Command AntiVirus is anti-virus software for network and desktop applications. Command Software Systems, Inc., Jupiter, Florida, `www.commandcom.com`.

SharewareJunkies is on the World Wide Web at `www.sharewarejunkies.com`.

Just say No

The failure of speech recognition

by Esther Schindler

Not very long ago, speech recognition was expected to be "the next big thing," likely to change how we work with computers. It hasn't turned out that way. Why is that?

Speech recognition, whether on OS/2 or other platforms, is a topic I care about. After all, I was the author of *The Computer Speech Book*, published way back in early 1996, which is (not too surprisingly) out of print. *The Computer Speech Book* was a companion, of sorts, to VoiceType Dictation (VTD), the version preceding the one included in OS/2 Warp. In the book, I made a few gentle prognostications, but I was generally upbeat about opportunities in the speech recognition market for any vendors who were willing to tackle its challenges.

Once upon a time...

When IBM decided to include speech recognition in OS/2 Warp 4, they made a big deal about it. IBM strongly emphasized VTD as a unique selling point in the then-upcoming OS/2 Warp 4 at the IBM Technical Interchange in Nashville, and they did so effectively. The feature earned a lot of attention in the mainstream press as well as in the computer industry.

Since then, however, VTD has taken a back seat to a new passion. Between the Technical Interchange and the release date, IBM got the Java religion. At the IBM OS/2 Warp 4 rollout in San Francisco, the speech demo was given about five minutes, with the rest of the emphasis on Java, Java, Java.

Nonetheless, OS/2 users, proud of a technology that was built into the operating system (and *not* built into the competition's OS) gamely tried out VTD when they installed the new version of OS/2. The extended attributes issue that focused on speech recognition was among our most popular. But despite initial enthusiasm, most OS/2 users quit using VTD after a few months. Maybe the software was too hard to train, or awkward to use, or its technical requirements were too high, but it didn't stand the test of time.

Some blame VTD's lackluster showing on IBM's pursuant updates of speech recognition technology for Windows only. ViaVoice has sold quite a few copies in the consumer marketplace (I recall the number 400,000 being bandied about), not to mention the competition it's gotten from Dragon and Lernhout & Hauspie. I don't think that this situation has anything to do with OS/2, however, and I'll tell you why.

The future's not what it used to be

I haven't been especially impressed with the progress the computer speech industry has made since my book was published in 1996. I really expected that they'd do a better job of converging text-to-speech with speech recognition, by now. The only place you see such work being done is on computer telephony (CTI) applications ("For a list of ways that technology has not improved the quality of life, press or say '3.'"). That's useful, but it's not especially interesting.

Instead, companies like IBM and Dragon saw the consumer market as a treasure trove. They tried to sell speech recognition as a "you talk, it types" answer for a problem that most people really didn't have. Technically savvy people are comfortable with a keyboard, and type faster than the speech engine can recognize words. Computer novices don't want to tell the computer what to do with their files; what they want is an artificial intelligence that understands speech. The result, alas, is that consumers have yet another technology in which the promise doesn't live up to the hype, and their expectations are set incorrectly.

This isn't specific to OS/2. OS/2 is affected because it was the first operating system to incorporate speech recognition, but more important is the changes in technology, and the difficulty the computer industry has had incorporating speech recognition as a tool that solves real problems.

Speech recognition technology

In a way, it's easiest to talk about the technology. It's gotten better. Much better. Continuous speech recognition takes more computing horsepower than we may have envisioned, but 350 MHz systems are considered affordable today, and the speech engines have undeniably improved.

Not for OS/2, mind you, but overall the technology has gotten past the requirement. to. speak. slowly. and. distinctly.

When IBM PSP chose not to develop an OS/2 version of ViaVoice, Mike Lawrie (then in charge of OS/2) announced the decision at a Phoenix OS/2 Society meeting. At the time, he said that he'd spoken with IBM's speech division about doing a Java version of ViaVoice. That was in September 1997, and it's the last you heard of it, right?

A month or two back, hidden in Javasoft's JDC Newsletter, was the following announcement:

> JAVA SPEECH API beta specifications released. The Java Speech API is designed to incorporate speech technology into Java applications and applets, and defines cross-platform support for command and control recognizers, dictation systems, and speech synthesizers. The API contains the Java Speech Markup Language (JSML) and the Java Speech Grammar Format (JSGF). JSML gives you the capability to annotate text with

information on how it should be spoken by a speech synthesizer. And JSGF provides capability for specifying sets of commands and phrases that a speech recognizer should listen for—so that applications can take an action or accept user input. To access the specifications, see: `http://java.sun.com/products/java-media/speech`

As far as I know, this will not work in OS/2. On the other hand, IBM never pointed out that the technology exists, so maybe it doesn't matter.

However, the failure isn't IBM's commitment to speech vis-a-vis OS/2. Speech recognition hasn't found its place yet, in any product, on any platform.

What do you do with it?

Speech recognition has had modest success in a few areas, notably among people who are already comfortable with dictation—lawyers and doctors—with a vested interest in putting up with the foibles. A transcription service can cost upwards of $1,000 a week; the savings are enough to justify a couple of hours spent on training. Plus, a doctor can easily understand the benefits of dictating results to the computer while still examining her patient. Even so, the marketing success in this arena isn't anything to write—or talk—home about.

Speech recognition is understandably popular among the disabled and those suffering from carpal tunnel syndrome, though these are niche markets at best. In fact, most speech recognition vendors distance themselves from the "disabled" market because they don't want the technology pigeonholed there.

The technology is gaining active adoption among CTI developers, in part because the user is already used to talking into a telephone, and the choices are generally simple. It's also being seriously investigated by those who create gizmos with embedded systems, such as a hands-free car phone.

For most computer users, however, speech recognition is still a solution in search of a problem. It's sold as a dictation and navigation tool, but it's not very good at either job. It *could* be, but it isn't.

What's wrong with speech?

The problem isn't in the speaking/recognition part of the equation. People make typos in their text all the time, and we know how to cope with that. However, speech is inherently serial and word processors are random-access. I edit while I'm typing; I scroll back to add a sentence, or to change a word. Speech recognition doesn't really enable you to do that, and it can also be self-distracting. I *typed The Computer Speech Book*, not dictated it, because my "writing" circuits are wired differently than my talking circuits. I found myself noticing what I was saying, rather than saying it.

None of the speech recognition packages really account for the "talking out loud" issues. As an editor once told me, "I'm already distracted by my co-worker, in the next cube, who's making his lunch date. Do I really want to hear him say, 'Bold, 12 point'?" This isn't likely to be solved by technology; it's a people/facilities management issue. Speech works great in a private office, which is why it's more popular in SOHO businesses, which are less cubeful. But it's inappropriate in a lot of big corporate offices... where, incidentally, IBM does most of its OS/2 marketing.

Also, speech recognition is inherently and unnaturally modal. You're either in "navigation mode" or in "dictation mode." That makes it even harder to devise a user interface that works the way people do, because we don't make the same distinctions in our speech that the computer must.

Very few companies have given thought to the change in user interface design that speech recognition requires. Some have tried. To be kind, they have had mixed success. A few games have been released which incorporate speech. (I don't think any of them have done well, but I don't follow that market, and they could fail for non-speech reasons so I draw no conclusions.) At least one "Teach yourself Spanish" program uses ViaVoice, though I haven't seen how well it works. I've seen a demo of one pretty darn good application (for OS/2, mind you) that hooks up speech with DB2/2, and the same company has a vertical application based on it.

However, very little of this innovation is coming from the big companies, who are always in a sweat to get out a new version, and they don't have the ability to start over and redesign the application for speech from scratch if that's what it needs. And, in most small innovative startups, the companies are usually stronger in technology than in marketing skills.

That's also why I expect more speech recognition features to be in "non-computer" items like cars and cell phones. But I hate to think what my car would do based on what I say in traffic. Most of my orders are anatomically impossible.

If it works, use it

I'm bound to get email from OS/2 users who tell me how much they love VTD, or how much they enjoy using its competition on a Windows machine. That's fine, but it's not what I'm talking about. If the software works for you, enjoy it. I'm focusing on the higher percentage of OS/2 users who don't use the speech recognition features, and in particular the number who installed it and turned it into shelfware. For those people, the level of technology wasn't up to snuff.

On OS/2 or otherwise, right now speech is duct-taped on, with all the elegance of the first mouse-driven DOS applications that let you *click* on "Enter 1 to add records, 2 to edit records, 99 to exit." When it's added to an application, it's all-too-often tacked on as an afterthought.

Do you think the problems will be solved, or is it more likely that speech recognition will become another technology about which we say, "That was cool. Whatever became of it?"

Hoping for a new client

Breathing new life into OS/2

by David Both

Aurora is IBM's next version of OS/2 Warp Server. This new server product will be officially named "OS/2 Warp Server for e-business."

In the last few days before this article was written, IBM has been giving indications that there will also be an Aurora client. Presumably this new client will be called Warp for e-business or something similar.

In November of 1998, I was in Austin, Texas, to help IBM begin the process of writing the new Warp Server for e-business certification tests. As part of that process, I will also (probably—as it has not yet been finalized) write some of the questions for that test. I have been given indications that there will be two tests—a server test and a client test.

This all begins to look like IBM will actually do what many of us have been asking them to do for some time: provide a new client to go with the Aurora server.

Client = support

I really hope that we do get both a server and a client. The client is the key to changing the perception that IBM is not supporting OS/2 today.

A new OS/2 client from IBM tells customers that IBM is still supporting the desktop, and therefore the users. Users don't use or care about servers; we care about the client. We care about the operating system on the computer in front of us, not the computer in the back room. The server is the concern of the administrator.

Of course, when I am being the administrator for my own network or for my customer or employer, I do care about the server. But even then, most of my interaction with the server is through the client on my desk. My role as user is larger than, and transcends, my role as administrator because even when administering I am using.

I love the fact that Warp Server for e-business will allow me to administer NT servers.

Alternative to open source

I have seen a lot of discussion recently about the possibility of IBM going open source with an OS/2 client. Some of that discussion has been in these pages.

I do not believe that IBM will go open source with any OS/2 products, any time soon. This is despite the fact that IBM just released an open source replacement for sendmail.

IBM spent over a billion dollars on the development of OS/2, and does not want to lose control of the platform. It is still a strategic platform—however temporary that might be perceived to be.

I personally believe that strategic means just that—a carefully worked out plan of action. IBM has a carefully worked out plan of action in which OS/2 plays a central role. OS/2 will be around for a long time to come.

Will it take over the world? No.

Will it always be called OS/2 or Warp? No.

Will it even be recognizable to those of us who use it today? Probably not.

I do think that IBM may surprise some folks, however, and do something that is different for them, but which has already been done by others. Sun Microsystems now provides Solaris free of charge (except for media and shipping charges) to noncommercial users. Check out the Sun free Solaris page at `www.sun.com/solaris/freesolaris.html`.

I think if IBM wants to provide a low cost client to noncommercial users, this may be the direction they take. It allows them to keep control and yet provides the single end user inexpensive access to the best PC operating system on the planet. (Pardon me if my true colors show in that last statement!)

New life

Aurora breathes new life into OS/2, not just for its new features (like JFS and Volume Manager), but also for the fact that it is there. People who use OS/2 can see that IBM is still actively supporting and developing OS/2. People who don't use OS/2 can see the same thing—if they want to.

The December 21 issue of *InfoWorld* has an interesting article about OS/2 for e-business called "Reborn OS/2 Warp Server takes a stand against NT." Written by Tom Yager, the article indicates that OS/2—at least in its server form—is worth another look and that it rivals Windows NT in many ways. Yager says that in some ways Aurora is superior to NT. Well *we* knew that all along!

New attitude

I have personally stopped caring whether the rest of the computing world loves or uses OS/2. I am no longer on a crusade to convert the heathen masses.

What I do care about is that OS/2 stays alive and that I can use it to do everything that I need to do.

I see no danger of OS/2 becoming orphaned or of dying any time soon. Aurora—which means "early stage of development of anything," and is associated with the Roman goddess of the dawn—gives me confidence that IBM continues to actively support OS/2 even if some parts of the company don't get it.

I care about having a choice. OS/2 gives me a real choice.

Adding a Macintosh to an OS/2 network

by Bill Schindler

In the last couple years, getting a multiplicity of computing platforms to coexist on our LAN has become a very important issue.

At any point in time, we have OS/2 Warp, Windows 95, Windows NT, and Macintosh systems all talking to our OS/2 Warp Server. Getting the Windows systems onto the network is fairly easy. Getting the Macs to work with the network is, well, interesting.

For the following instructions, I'm assuming that you have an OS/2 Warp Server running. I'm also assuming that the Macintosh is running Mac OS 8.x.

LAN Server Macintosh

IBM has a product called LAN Server Macintosh (LSM) which makes OS/2 Warp Server look like a Macintosh to any Macs on the network. The product works, and works well. Except....

LSM is one of those IBM products that are almost impossible to find. There's no evidence on any of the IBM Web sites that LSM is offered as a for-sale product. I got a copy by talking to someone at my local IBM office. I'd suggest you try your local office first. (If you find the "correct channels" for acquiring LSM, please let us know!)

Once you have a copy of LSM, you'll need FixPaks. Go to `ftp.software.ibm.com`, go into the `ps/products/lan/fixes/lsm` directory and download the LSM FixPaks.

To get a working LSM, install from the diskettes, reboot, and then install the FixPaks. Reboot again. Don't even think of trying out LSM until you've installed the FixPaks! The un-fixed version will bring your server to its knees and may even crash.

Once LSM is running, go to the Mac and open the Chooser (under the Apple menu). Turn on Appletalk. Your OS/2 Warp Server should be listed. Double-click the server name, log in, and all of your server's aliases will appear. You can set server aliases to show up on the Mac's desktop as drives.

Printing

On the server side, you'll notice that LSM can emulate a LaserWriter 8. You can try printing from the Mac using LSM, but my experience has been that it just doesn't work.

If you have TCP/IP running, there's a more reliable way to set up a networked printer for the Mac. (Note: This method works, even if you don't have OS/2 Warp Server. This method should also allow any Linux systems on your network to print through your OS/2 system.)

The first step is to set up a printer daemon on the OS/2 system.

On the OS/2 system connected to the printer, open the TCP/IP Configuration object (in the TCP/IP Internet LAN folder).

Select the Autostart page. Select the "lpd" entry from the list on the left. Check the **Autostart** checkbox. Select the **Detached** radio button (unless you have other services starting via the INet server). In the **Parameters** field, type "-c" to keep the printer daemon from adding a banner page to each print job.

Close the Configuration notebook and save your changes.

Reboot the system to load the lpd daemon. Or go to a command line and enter `detach lpd -c` to manually load the daemon without rebooting.

You now need to do some set up on the Macintosh.

First, make sure you have the appropriate files installed for your printer. If your printer uses PostScript, you can get away with using the standard printer drivers that come with the Mac.

On the Mac, double-click on the Hard Disk. Open the Apple Extras folder. Open the Apple LaserWriter Software folder. Double-click on **Desktop Printer Utility**.

The pull-down will only have LaserWriter 8. That's okay, you'll fix that later. Select **Printer (LPR)**. Click OK.

You're now looking at a dialog with two areas. The top area has **PostScript Printer Description**. Press the "Change..." button next to it and select the correct printer from the list.

The bottom area says **Internet Printer**. Press the "Change..." button next to it. For the **Printer Address**, enter the host name or IP address of the OS/2 system that has the printer. For **Queue**, enter the printer port on the OS/2 system that the printer is attached to, in lower case without a colon, like: "lpt1" or "lpt2". Click the Verify button to make sure that you don't have any typos. If it checks out, click OK.

Go to the menu and select File, Save as. If you've done everything right, a new printer icon will appear on the desktop.

Try printing from the Macintosh. You should see the print job pass through the Mac's print queue, briefly appear on the OS/2 system, and then print.

That's all there is to it!

Shareware success

What role does shareware play, for OS/2 users?

by Thomas Bradford, president, BMT Micro

feature

If you use OS/2, I'll bet you a barbecue dinner in Smithfield, NC that you use at least one shareware program on a regular basis. For OS/2 users, software distributed using the shareware model is more than downloading cool programs and deleting them when the free trial period expires. Shareware is a necessity, to get the tools required to perform critical tasks.

In this two-part article, I'll explain my viewpoints about OS/2 shareware. This first part is for every reader and for would-be shareware authors. In the second installment, scheduled for next issue, I'll address issues for shareware authors with a burning desire to see their programs succeed using the established recipes for success that are available to all and which, sadly, are almost always overlooked.

In praise of shareware authors

OS/2 product development has never been able to capture the resources of the big software publishers, at least for the long haul. That has left us in a bind, more than once. Regardless of the on-again, off-again marketing to which OS/2 has been subjected, we've been able to keep going largely because of the efforts of shareware authors.

Shareware authors have continued to write applications that rival and surpass the software developed by a "Big Company." In fact, a major contributing factor to the role shareware has played in the OS/2 market has been the small selection of commercial titles. Had more commercial titles competed for our attention, shareware titles wouldn't have received as much attention. As a result, the OS/2 niche has provided a fertile, almost sheltered environment.

The bad news is that it is becoming increasingly difficult to measure a program's success in terms of financial reward. In the past—notably the period just prior to the release of Windows 95 extending through the months immediately following the release of Warp 4—OS/2 shareware authors who wrote a popular application could come close to earning a living, as long as the programmer didn't rest on his laurels and as long as he continued to provide support and updates.

State of the shareware market

The current situation is that OS/2 shareware sales have been trending downward steadily for over a year and a half. There have been a few upward spikes, but for the most part these can be attributed to update and maintenance releases of existing software.

Some would argue that new shareware releases have not only been steady but that there continues to be "all kinds of new shareware." I can only agree, but I would add that much of the new shareware is increasingly obtuse and of little value to the average user. To phrase it another way, the OS/2 user base (which has always been a niche group) is itself splitting up into smaller niches. The average user, who tends to be a more mainstream, less dogmatic person, has no choice but to slowly migrate away from OS/2. These average users are the group that would classify themselves as "abandoned" or would say that OS/2 no longer offers the type of programs they need to be productive in whatever environment they find themselves.

Without sounding alarmist, I don't expect this trend to reverse itself, with or without the release of a new Warp client. This view must be balanced by an equally strong determination to keep OS/2 going into the next century. The role shareware will play in our future is as important as ever, because it becomes more clear each day that the need to become "self supporting" is looming on the horizon.

For the record, I'm still "out" on the relevance of Java. I'll come around as soon as someone writes what I call "an application my father would buy."

So, I'm a pessimist, right? Wrong. The horse might be out of the barn, but it's still in the pasture and we own the pasture. There are more than enough OS/2 shareware developers with the programming talent to write the applications necessary in order for us to avoid being marginalized. This is where this article takes an uphill turn and things are not so bad as they might seem.

So what does it take?

The cure for what ails us falls on the shoulders of both the user of shareware and the shareware authors. As a shareware user, you're morally obligated to pay for the shareware if you use it beyond what the author intended as described (usually) in the help file or a text file in the archive.

There are other moral considerations, such as not giving license information to friends, purchasing one copy for use within an entire organization, and otherwise depriving the author of other potential customers and income.

That's not asking too much. Like most people, shareware authors tend to be motivated by the potential of financial reward for their efforts. Most shareware authors struggle to come close to justifying the time spent writing and supporting an application.

Shareware authors are people first, programmers second. A particular author may be driven by different desires, have a unique agenda, and set out to accomplish a different goal than another author might be. I regularly get

phone calls from developers who ask "What kind of applications are people asking for?" Conversely, I can look in the incoming directory of our FTP site tomorrow morning and see a new shareware program that calculates how far it is from the Earth to Pluto in centimeters on any given day, and right-clicking on Pluto will perform Celsius to Kelvin conversions.

The point is, shareware authors are not all driven by financial reward, and not all programs are written with mass appeal in mind. That's as it should be. Otherwise, we wouldn't have the plethora of useful utilities that we need once or twice in our computing lives to get out of a jam, or to fix something, or to make a certain task easier than it otherwise might have been.

The closest I can feel to a kid in a candy store is to be turned loose on an FTP site with a ton of new shareware programs waiting to be unzipped and examined. If you haven't tried it yourself, send me an email and I'll send you a complementary copy of one of our OS/2 shareware discs. I really will.

Making a success of shareware

I'd like to share some of the secrets and tips I've picked up along the way with current and budding developers in hopes that their programs might be more successful than they otherwise might have been. As a rule, shareware authors tend to be eager to please, sometimes to a fault. Finishing the program and getting it out the door should be the number one priority.

Over the past five years I've had the great opportunity and pleasure to work closely with the brightest and most successful OS/2 shareware authors. I've had the opportunity to see behind the curtain, watch the successes and failures and witness the trials and tribulations of many a program and programmer. I've gotten to know many authors personally, and on several occasions have traveled as far as Europe to visit with them. In fact, prior to Warpstock in Chicago this year I'd met more European OS/2 shareware authors than American ones. (Note: OS/2 was always more popular in Europe, particularly Germany, than in the USA.)

Next month, I'll outline several of the traps and pitfalls that shareware authors experience, almost all of which can be easily avoided.

Thomas Bradford is founder and president of BMT Micro, Inc., a software reseller specializing in OS/2 shareware since 1992. BMT Micro started as a home based business, and has grown to 6 employees with sales of $2 million. While specializing in OS/2 shareware, BMT Micro has diversified into new areas including Web publishing, technical support services, and software publication. You can reach Thomas at tbrad@bmtmicro.com.

Geographical SIGs

Meeting other OS/2 users outside Phoenix

by Esther Schindler

If a listed member is in a location near you, we encourage you to get in touch with them. Get together for coffee, talk about OS/2... and please tell us about the meeting! We'll print it in our SIGs section. Plus, if your meeting is a success, it'll encourage other people to gather.

Note, too, that two members did set meeting dates; look for their entries in the calendar!

You don't have to live next door to these folks to get in touch. If your business brings you to the locale of another POSSI member, every so often, well... why not get in touch? Perhaps you can have dinner with a friendly face. That's worth the effort for any traveller, much less for another OS/2 user.

Monterey Park, California

Glen Hudson

glhudso@ibm.net

Second Thursday of every month, 7:00pm–9:00pm.

TouchVoice Corporation, 1749 Potrero Grand Dr, #K, Monterey Park, CA 91755

"To give people an idea the geographical location, Monterey Park is located east of downtown Los Angeles, south of Pasadena, north of City Of Commerce, and west of City of Industry."

San Bernardino, California area

Tony Steczkowski

tonys@eee.org

Let's meet on Janurary 30.

Miami, Florida

Jeff Blakley

jblakley@icanect.net

"List me as a contact for the Miami, Florida, area."

Chicago, Illinois

Rick Blankenbaker

rickdb@mc.net

815-648-4054

"You can add my name to your listing of geographical SIG contacts. I live near Harvard, Illinois; about 70 miles or so northwest of Chicago, just outside Wisconsin."

Saint Louis, Missouri and environs

Ronald Boschelli

rockypc1@midwest.net

618-654-3917, fax: 618-654-5528

"I currently belong to St. Louis Gateway Users Group. I'm in Southern Illinois, 30 miles due east of St. Louis, MO."

Billings, Montana

Thom Felton

tfelton@mcn.net

"Probably not many OS/2 users near Billings, Montana but if they contact me we can get together."

Victoria, Texas

Robert Harvey

rharvey@icsi.net

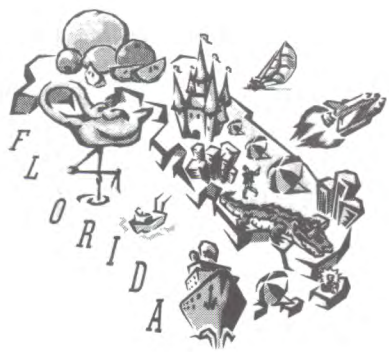
"I'm a new member and would like to host a regional POSSI meeting in Victoria, Texas."

Washington, DC area

Richard R. Klemmer

richard@webtrek.com

"If people want to get together in this area, and no one else wants to take the lead, I'll be the point of contact and coordinate the effort. If someone else wants to do this, or assist, I'd be very happy."



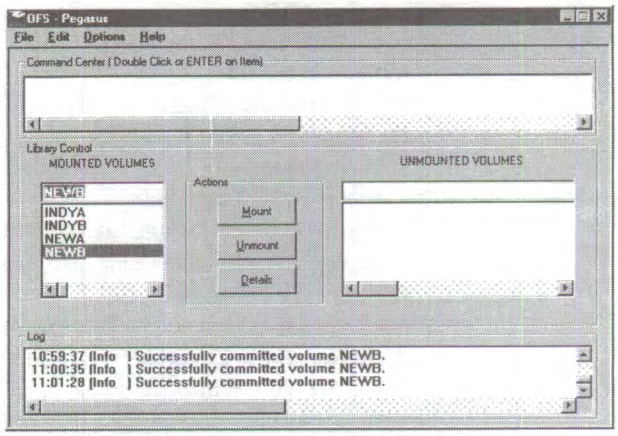
Look at what's in store

by Esther Schindler

Organizations, large and small, are increasingly searching for a reliable storage method for their mission-critical files. Optical storage offers an effective solution, yet the key is to make certain that the system you choose today will work for you tomorrow.

The Pegasus Optical File System for OS/2 is a complete file system and volume manager designed specifically for optical technology, making it easy to maintain a dependable data archive.

On Tuesday, February 9th, Pegasus Disk Technologies will send Roy Slicker to show us this compelling application for OS/2 business users. (Besides, we know you're curious about optical technology anyway.)



About Pegasus-OFS

This highly flexible software allows you to efficiently store and retrieve vast amounts of electronic information. The Pegasus-OFS assures optical data cartridge interchangeability between operating systems, eliminating the need for costly data conversion.

In effect, by assigning a letter to the optical hardware, Pegasus-OFS provides simple data access and treats each optical disk as a volume, and each side of a disk as a subdirectory.

Each disk surface is directly accessible through the file system, so related data can easily be clustered together. You can also reserve space on an optical disk for adding related data later, which minimizes "thrashing" on a jukebox. And, you don't have to use a special interface (such as ADSM), imaging system or be a developer to use it.

This product isn't limited to high-end solutions. If you want to create long-term storage and archive data, you can use CD drives and towers, and WORM and rewriteable devices.

Because a version of the software is available for both OS/2 and Windows NT, you don't have to worry that about data compatibility across platform.

The clustering approach lets the imaging system developer group together documents, in much the same way that documents are organized in paper file cabinets. Pegasus-OFS caches recently written files, so a user can get at things that were scanned recently. But more importantly, when data is retrieved from the archive, Pegasus-OFS only needs to visit one disk rather than... who knows how many?

What do you need to get started? A Bus Logic or Adaptec SCSI adaptor, OS/2 2.x or later, 2-10MB storage per volume for directory caching and optimization, and a 486/33 MHz computer (or better) with 16 MB of RAM.

You can find more information about the product at www.pegasus-ofs.com. They're also enthusiastic about working with software developers, especially those involved with imaging solutions.

what

- Pegasus-OFS optical storage solution

where

- Mtn Preserve Reception Center
  1431 E Dunlap
  Phoenix, Arizona

when

- Tuesday, February 9, 1999
- 6:30pm: Q&A session
- 7:00pm: Regular meeting

When and where

The Phoenix OS/2 Society's general meeting is on Tuesday, February 9. Meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap. A "random access" Q&A session begins at 6:30pm, and the meeting gets underway at 7:00pm.

Coming events

A list of events scheduled by the Phoenix OS/2 Society and other OS/2 user groups.

history

February 1999

February

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

3 Tampa Bay Java Users open house. IBM Services Center, Lake Pointe One Building, 3109 W Dr Martin Luther King Blvd, Tampa FL. Contact timb001@ibm.net.

5 Magazine submission deadline for March issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

9 General meeting; Pegasus-OFS, optical storage system for OS/2. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

27 Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get *extended attributes* ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale, 9355 E Mark Lane. Call 602-585-5852 or send email to esther@bitranch.com for directions.

March 1999

March

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7	8	9	10	11	12	13
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21	22	23	24	25	26	27
28	29	30	31			

2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for April issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

9 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

27 Board meeting and magazine prep.

April 1999

April

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18	19	20	21	22	23	24
25	26	27	28	29	30	

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

6 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

13 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

24 Board meeting and magazine prep.

May 1999

May

S	M	T	W	T	F	S
						1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

4 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for June issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

11 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

22 Board meeting and magazine prep.

June 1999

June

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for July issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

9 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

27 Board meeting and magazine prep.

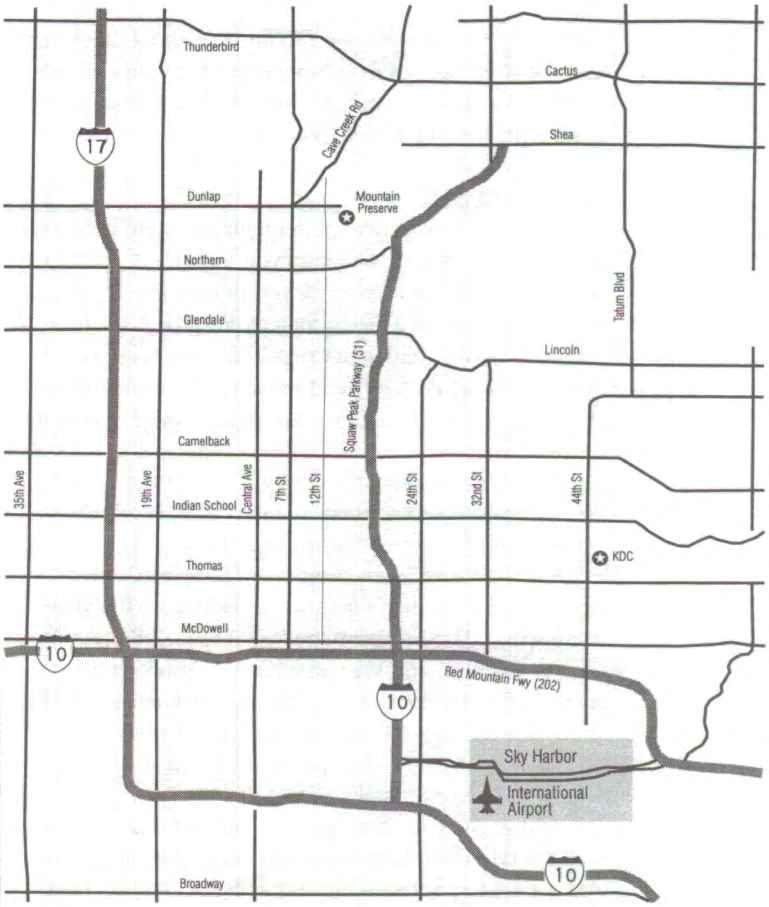
Meeting locations

Directions to meeting locations.

General meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

From the Black Canyon, exit at Dunlap and head east. From the Squaw Peak, exit at Northern. Go west to 12th Street, turn right, go north to Dunlap, turn right, and it's two blocks up on the right.

The "How OS/2 Works General Interest Group" and the Internet SIG (net.sig) meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking is available in the garage behind the building.



I made a little list

by Esther Schindler

In all likelihood, you're familiar with listservs. You write to an email "group" to which people subscribe, and the messages are automatically distributed to all the listserv members. A listserv usually focuses on a specific title, from issues of interest to OS/2-based ISPs (`os2-isp@stat.com`) to fans of particular a capella singing groups (`netfobs@lists.best.com`) to... well, perhaps you get the idea. Lists can have just a few individuals or thousands of subscribers.

Listservs can be open (any member can post), or moderated (one person approves each message before the system disseminates it). Often, the list also offers a "digest version"; you're sent one long message (containing the day's activity) instead of individual email messages.

The Phoenix OS/2 Society maintains two listservs for its members. The `announce@possi.org` list is a moderated list used for bulletins ("Until Friday, Vendor X has a special price for members"). The list `discussion@possi.org` is where we discuss OS/2 topics, from technical support issues to thoughts about what the latest IBM action means. The announce list has only a few messages per month; the discussion list can have 40 or more messages per day.

The lists are meant for POSSI members only, but we haven't been very good about letting new members know how to sign up (often we don't have their email IDs) or excluding nonmembers. We don't try too hard, on the latter, because many lurkers eventually turn into members.

So we leave it to you to sign up manually. Visit `www.possi.org/lists.htm` (not visible from the home page!) and fill out the form. If you ever want to unsubscribe from the listserv, you can use the same form to do so.

OpenDoc part II

by Marilyn Pizzo

Continuing last month's quest to find out about OpenDoc, let's see what each of its components has to offer. Before we can use these components effectively, we must understand what we can do with them.

Page Layout

The Page Layout component in OpenDoc is the only component in OpenDoc that allows you to preview what your document will look like before you print. It is a desktop publisher of sorts as it allows for a multiple page document, page numbering, setting margins, and using headers and footers. You would use Page Layout as your root component if you need to number your multiple page document consecutively.

To see what's available, let's look at the Page Layout Properties notebook settings. You may want to adjust some of these settings, depending on your document.

Drag the Page Layout component template icon to the Desktop, open it, then right click anywhere on the large white space. This brings up the Page Layout—Properties screen. The Type and View notebook pages don't have anything fun, but look at them for your reference. File tells you when the Page Layout component was originally created, when it was last changed, and when it was last accessed. The next notebook page is Colors, where you can change the page, background, and foreground colors with the **Edit color** button. If you change the page color and want it to print with those changes, you must check the Print page color box.

Next you will see the Margins notebook page. If you think in metric, the unit of measure can be changed from inches to centimeters, which affects how the rulers are presented. The **Margin Line** option lets you choose how margins will appear on the screen—dashes, dots, solid line, or a combination of dashes and dots. There are also options to change the horizontal and vertical margins, edit the color of how the margins appear on the screen, and the option to show the margins on the screen or not. My preference is to show margins, so I know where to place the components I want to embed in the Page Layout as a root component.

The Grid notebook page gives us a few more options to look at. If you check **Snap to grid**, document text or graphics are placed directly along Page Layout grid lines. Checking **Show grid** displays the grid screen. **Unit of measure** allows you to select the type of measure in which the grids will be presented, inches or centimeters. You can change how the grid line appears on the screen—in dots or dashes. You can also edit the grid line color by choosing **Edit color**. One more option available is to change the space between grid lines by changing the Spacing.

The next notebook page is Rulers. The options here are what you would expect—show rulers, unit of measure, and the ability to change the Ruler line color.

On the Page notebook page, you can use the **Page Number Location** to choose where you want the page numbers to appear within your document. You have the choice of bottom or top of the page; left, right, or middle; or no page numbering. You can also choose what page to start numbering on, and what page number to start with. In addition, you can change the size of the paper the document is displayed and printed on using the Page size option.

The last notebook page of interest is the Header/Footer page. As you can see, if you have been at your computer and following along, you have the option to set what page the headers and footers start on as well as the space to tyxt for each.

An interesting point I found is that the Rotate tool allows you to turn a selected object a 360 degree radius on an axis. Also, the Scale tool allows you to change the frame size and the scale of the data in the frame including changing the size of text, line spacing, and proportions of embedded objects. The Go To Page feature is handy; if you have a multiple page document you can go directly to a specific page instead of scrolling through the pages hoping you stop on the correct one.

Text Part

The Text Part component is a word processing type of application that allows you to create simple text documents within OpenDoc. You can wrap text around the shape of embedded components. If you move that embedded component, the text is automatically reformatted. There are two ways to work within the Text Part component: using the menu bar or using pop-up menus.

The menu bar is for an active Text Part component. The Document, Edit, and View options are standard. The Options menu contains choices specific to Text Part. The Import option allows you to import any ASCII or RTF text into the current Text Part document. The Export option allows you to export the current Text Part data, in ASCII or RTF format, into text editors outside of OpenDoc. You can change the size and style of the default font in the current Text Part document. You can also change the font color and the background color. The Alignment option allows you to change the placement of blocks of text in your document. Locking frame allows you to lock an embedded compo-

nent you have selected into its current spot in the Text Part Document.

There are two Text Part component pop-up menus. When you right-click on an active Text Part component, your options are: Open as, which allows you to view information on the current document in Icon, Tree, or Details view; Properties, which will allow you to open the Text Part properties notebook; Show As, which allows you to display the current embedded component in Small Icon, Large Icon, Thumbnail, or Frame view; Export, which allows you to export your current Text Part data to text editors outside of OpenDoc; Default Font, which lets you change the system default font used each time you open the current Text Part document; Text and Back Color, which allow you to change the font color and Text Part component background color that appears each time you open the current Text Part document; Paste, which enables you to select different ways of pasting data that has been cut or copied from within the document; and Help.

When you right click on a selected Text Part component area or selected data a different pop-up menu appears. Many options are the same as before, but a unique one is Style. This option allows you to change format emphasis within the selected Text Part text to Bold, Italic, Underlined, Strikeout, and Outline.

And that's just text!

That is definitely enough to swallow for one month. Next time we will look at the 2D Graphics component and show how all of these can be used together.

CD CARE CD Repair Kit

Fixing your CD-ROMs, from scratch

by Craig Greenwood

review

If you are over 20, you probably learned to handle your old LP records (new at the time) with care. When CDs took over the audio scene, out of habit and common sense you probably handled them with care too, even though it was not nearly as critical. Back in 1982, I got my first audio CD player—the legendary Magnavox CDB650, which had one of the best reputations for error correction of its time. When it (or most any audio CD player) encounters a section of data that it can't read, it fills in the gap with an approximation based on the adjacent data. This error correction works great for music, and for small sections of loss due to dirt and scratches, it almost always goes unnoticed by the human ear.

With data CDs, though, fudging in sections of unreadable data is not an acceptable procedure. Scratches, smudges, and dirt which make data unreadable on certain areas of a CD can make the entire disc unusable. Repairing a damaged data CD can often be the only way to save it from the trash can.

CD CARE CD Repair Kit
$14.95

Madison International
1801 Avenue of the Stars, Ste 928
Century City, CA 90067 USA
www.cdcare.com

I wanted to test the CD CARE CD Repair Kit repair kit to see how effective it would be in salvaging a damaged disk, but first I needed a damaged disk to test it on. In recent history, I have had two CDs that became unreadable. One was the game Drilling Billy, which was so smudged and dirty it had begun skipping frames and shutting down erratically. It didn't need repair, just washing. The other one was an edutainment title that was broken halfway through by a child taking it out of a tight-holding case. It didn't need repair, but replacement. I needed a test disk that I could damage in a way that repair might be an option, so I grabbed one that accompanied a recent direct mail advertising campaign.

I chose a small, flat screwdriver as my "implement of destruction," and proceeded to drag a corner of it radially across the face of the entire data track. When I looked at the resulting carnage, I found a scratch much deeper than I had expected—so deep that I could easily feel it. I resigned myself to the possibility that I would need to start the test over with another MSN Internet disk (including Explorer V4). When I put the assaulted disk into the CD drive, FileStar/2 (my file manager of choice) announced "Sector not found, Media not readable." No surprise here. Although it seemed futile, I decided to try repairing it anyway.

The CD CARE CD Repair Kit comes with two small bottles of fluid and three small buffing cloths: one cloth for each fluid, and one for general polishing. Bottle A—for cleaning and repairing—contains a thick white milky fluid. I applied a few drops to the data side of the CD and rubbed it around with one of the cloths. After approximately 20 seconds it dried and I buffed it off. Next I inserted the CD into the drive to see if it would now be readable. To my surprise it was! I confirmed its health status by copying a 7.4MB file to my hard drive with the "verify copy writes" option enabled. No problem.

I continued adding smaller scratches to the data track until it was unreadable once again. The scratch that accomplished this was one that was made with the flat part of the screwdriver blade, resulting in more of a scrape or scuff nearly a 16th of an inch wide. This was terminal, and even three applications of Fluid A could not resuscitate it.

Bottle B contains a clear, oily looking fluid and is to seal and protect. Allegedly it helps prevent dirt and fingerprints from collecting, which it does to a degree.

Does the CD Repair Kit work as advertised? I would say that it does. For the MSRP of $14.95 you get enough to repair 25 CDs. This seems to be a very reasonable way to protect your investment in the CDs that you own, particularly when replacing a disc is the only other alternative.

The CD CARE CD Repair Kit is distributed by Madison International, 1801 Avenue of the Stars, Suite 928, Century City, California 90067 USA. They are currently negotiating with some major retail outlets to carry the product. In the mean time it can be ordered from their Web site at www.cdcare.com. A user group discount of 15% or a $5 rebate is available for a limited time.

Craig Greenwood is a software adventurer of seven years, the reviews editor of extended attributes and a charter member of POSSI. Craig can be reached at craigg@bigfoot.com.

Backup your CDs? Yes! by Alan Zeichick

The information on a compact disc is valuable and expensive—but the disc itself is of negligible value. That's something I learned on two occasions: one, when my now-five-year-old accidentally trashed one of his computer games, and on another, when my Sony CD Walkman and a dozen CDs disappeared out of a hotel room. Replacing those audio discs cost much more than replacing my bargain-basement CD player.

Since then—and for the past year—I've routinely made backups of all critical compact discs. I use an inexpensive CD-R drive (currently a Mitsumi CR-2801TE, purchased for $299 less $100 rebate from CompUSA). Whenever my son Michael gets a new computer game, I make a backup, and then store the original away. And since I usually take the same collection of audio discs with me on the road, I've made duplicates of about eight or nine discs, which live in my travel bag with the new Sony CD Walkman. (I don't believe I'm violating any license agreements: only one disc, either original or backup, can be in use at any one time.)

The cost is amazingly low. I watch for promotions at places like CompUSA, OfficeMax, and Staples, where the discs usually cost $20 for ten blanks, with a $20 mail-in rebate. After California taxes and postage, the price of a blank is less than a quarter, so I stockpile blanks whenever I see such a promotion. The copying process itself takes about half an hour.

Since beginning this practice, I've not lost or destroyed any compact discs. But as an insurance policy, it's time and money well spent.

Alan Zeichick, founding editor-in-chief of OS/2 Magazine, is now an analyst with Camden Associates. He can be reached at zeichick@camdenassociates.com.

review

Not in the cards

OS/2 Tarot review

by Esther Schindler

In my public persona, I'm a very pragmatic person. But, though I don't make a big deal about it, I've always been active in spiritual searches for Truth with a capital T. I've investigated any number of religious and spiritual endeavors, and quietly adopted the practices that help me be a better person.

Some of those practices don't jibe with logical examination. I don't see why some pursuits work... but to my surprise, they often do.

Among those subjects is Tarot. Other than thinking that the cards are awfully pretty, and a curiosity about Tarot's history, I was never especially excited about the subject. But, over the years, a few Tarot readings have provided unexpected enlightenment. Tarot isn't good at providing answers for me personally, but it's a helpful (and pretty!) tool for getting oneself to look at a problem in a new way. By focusing attention on goals, obstacles, and influences, you can sometimes gain new insight into your problems.

So, when the opportunity came along to review OS/2 Tarot 1.0, a new shareware program by Matthew Davis, I grabbed at the chance. I thought it'd be fun, visually attractive, and possibly enlightening. Plus, it would be a break from writing about network management tools and IBM's shenanigans.

What is Tarot?

OS/2 Tarot includes a short HTML file as Tarot introduction and application documentation; it should do more. Rather than provide you with an in-depth explanation of Tarot, I'll point you at `www.tarot.com`, which has plenty of links on the subject.

But, because you need to know a little bit about the subject to understand the application, let me first give you a little background.

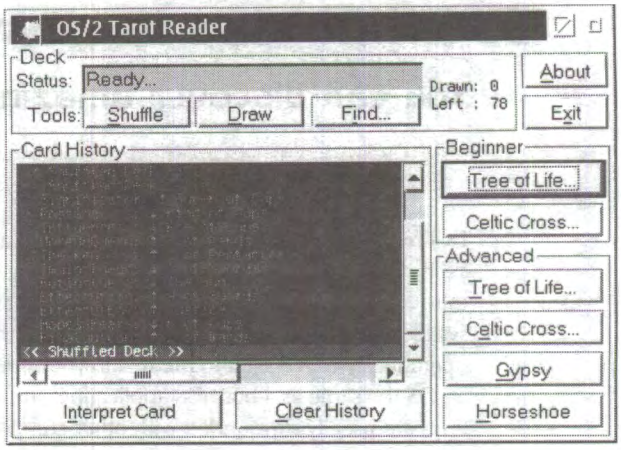
The Tarot card deck has 78 cards, divided into four sets (suits). The suit names have varied from pack to pack, over time, but most include Wands (or Rods), Cups, Swords, and Pentacles (or Disks). Each suit has ten numbered cards, Ace through Ten, plus four "court cards:" King, Queen, Knight, Page. Even the numbered cards have significance, such as "the fool" and "the lovers." The cards depict various ideas and persons, though the names are mostly rooted in Medieval or Renaissance religion and culture, particularly that of North Italy. The cards are numbered from 0 (Fool), to 21 (World or Universe).

OS/2 Tarot 1.0
by Matthew Davis

$15.00

Available from BMT Micro
`www.bmtmicro.com`

In a Tarot reading, the cards are shuffled three times and then spread in any number of traditional layouts. Each of the card positions has significance, and the card that lands in that position determines what the Tarot reader learns.



So where are the pictures?

OS/2 Tarot's installation was as simple as unzipping the file. The program is simple enough that—assuming you know anything about Tarot—you'll never need to look at the minimal documentation included.

Think about the issue or question you want to explore, and choose the layout you want to use; OS/2 Tarot includes four. If you choose a beginner's layout, OS/2 Tarot guides you through a short Q&A to determine your significator. It'll then "shuffle" the cards, and present you with the results and a short evaluation.

Note that I said *the results*. They're text-only, no pretty pictures. You see no visual layout, just a text listing in a separate window. Maybe I'm a dilettante, but half the enjoyment of Tarot is the contemplation of the images.

The analysis is pretty good, as far as it goes. Perhaps it feels like the data is straight out of a basic "how to interpret Tarot" book, but that's okay. I did get some value from my readings, which is the point of the exercise.

However, I'm disappointed. While I enjoyed using OS/2 Tarot for the short time it took to perform my evaluation, this has the feel of shareware that I'd "never get around to registering." The $15 registration isn't a hardship, but I'm not sure that there's $15 of value in this software. I didn't feel the beginning of the itch that says, "Pay this guy!" For comparison, I tried out a $25 shareware Suzie's Tarot98 for Windows 95, which provides only one layout but with attractive graphics. (Its reading wasn't as relevant, however.)

If you're into Tarot and you want a native OS/2 application, you'll get the job done with this program. However, an OS/2 application should at least equal the functionality of its Windows competition—and this one doesn't do so.

So what else is new?

You can discover amazing things when you look at a readme file

by John Wubbel

Last month, I wrote about making your OS/2 applications Year 2000 ready. I included, in the discussion, the topic of third party software. Perhaps that implied that operating systems fall into the same category. However, because the operating system is tight to the metal, you shouldn't view an OS the same as a business application. Business applications are usually surrounded with other components, utilities, or vendor supplied products — thus, third party.

In my experience, many IS shops do not readily adopt the latest operating system software release. They have some good reasons for the policy. They also have some not-so-good bureaucratic excuses for not installing the latest level of FixPak. For example, it is not uncommon to find a firm running OS/2 version 3.0 with FixPak 17. They probably have OS/2 Warp 4.0 on the shelf, and have never cracked the cellophane. You have to wonder why. Most IS managers figure that they need to allocate labor resources to retest their applications on the latest level of operating system code, which would set back the development schedule in the process.

If for no other reason, Year 2000 issues make 1999 the year for IS shops to throw in the towel on their downlevel OS/2 and make the system Year 2000 ready.

Stealth features

Fortunately, FixPak XR_M009 makes OS/2 Warp 4 Year 2000 ready. This is a welcome relief for those of us who simply want IBM to maintain a high level of support and quality assurance for OS/2 use into the future. It just seems unfortunate that this milestone was released without much publicity. Here I am, developing OS/2 programs and a member of the IBM Solutions Developer Program—yet I received nothing in the mail notifying me of the release.

Software companies that publish Y2K readiness statements and status on the Web could supply you with enough pages to fill at least one large notebook, maybe two. As one example of the depth of information available online, windowing is a term used to describe a sort of workaround to Y2K problems in applications. Systems, network, or database administration people expect the operating system or database product to be capable of handling 4 digit years. Inprise's Delphi 4.0 product, which supports a windowing technique, illustrates how a global variable set at runtime can be made available to aid a developer in overcoming Y2K problems in a Delphi application program.

What's stuffed in the FixPak

FixPak XR_M009 includes a number of new items that may also interest OS/2 users and developers. Along with the Year 2000 servicing, support for the Euro currency font is available in DSPRES.DLL. IBM also supplied enhancements to the HPFS check disk utility and support for removable media.

Then, to top that off, a new INI editor, called the Warp Registry Editor (REGEDIT2) is located in `c:\os2\system`. The first FixPak diskette has a readme file (readme.reg) to familiarize users with the utility. Now, maybe I am not telling you anything new as this utility apparently has been around for some time now. The program information that displays from the menu says "IBM—Lotus Registry Editor" with a 1996-1997 copyright date. Maybe I am just behind the times.

Unfortunately, at least in my case, you can whiz through and install the FixPak without noticing the new function and support. Many times I install a FixPak to get a particular fix. I am so programmed to throwing in the kicker diskettes to run SERVICE.EXE that I do not bother to read the accompanying readme files every time a FixPak is released. Therefore, I usually miss something that may be very useful.

In any case, XR_M009 does not seem to install the Warp Registry Editor anywhere as a desktop object. It's installed, but you would not notice it or realize where it is located unless you deliberately look for it.

I had a problem with printing. In the process of debugging the problem and in preparation for reporting a defect, the first thing the IBM Warranty Support organization would ask is whether the system is running with the latest level of code. So, like any busy developer, I failed to take the time to read the `readme.1st` file. In my haste, I went on to install the latest printer driver release. I wish an icon for the Warp Registry Editor had been installed somewhere, so that I would have noticed it!

The README is your friend

Given that IBM is not producing major point releases for OS/2 Warp, more features have been arriving via the FixPak delivery. Therefore, I highly recommend taking the time to read the `readme.1st` file, because you will find such interesting things as "section 6.0."

Never before has IBM released new function in a FixPak, but section 6.0 is the exception. Subsequent 6.x sections describe the new functions. For example, 6.1 goes into Year 2000 issues with REXX functions returning a two digit year only. This is significant for the thousands of REXX programs that support applications or database administration tasks.

In such cases, REXX programs could be viewed as third party software. This is another good reason to bring OS/2 up to the latest level. If you have gone to the trouble of making sure your application and all the associated third party software is Year 2000 ready, you certainly do not want to miss this key component.

FixPak wisdom

I am also an advocate of developing or keeping a machine available that does have the latest FixPak applied. Why? Because sometimes you can find out about problems earlier in the development cycle and address them sooner.

I once worked with a developer that was writing a graphics intensive application for global positioning and mapping. Zooming in on a location for better resolution or detail is a common routine in such programs. The developer mistakenly made assumptions about the "'32 bit'ness" of OS/2 at a time when the code was slowly transitioning from 16 to 32 bit. The graphics engine was 32 bit, but certain video drivers were not. He encountered the problems late in the development cycle and soon learned the benefit of running with the latest FixPak. For this individual, it lowered his risk of missing his schedule for delivering a product.

There is a whole list of new functionality shipped with XR_M009. I for one, am grateful for this support. It makes the platform even more stable without major design changes. Unlike the way new function is built into the product over the course of every revision or point release, driven by some marketing group inside IBM, the new function we see here is driven by recognized consumer needs, such as support for larger IDE drives, faster check disk function on HPFS drives, and font support for the European Common Currency—just to name a few. Much of this input comes to IBM through the warranty support organization and ISVs developing applications to solve problems using OS/2.

I only wish I read the readme(s) first.

New and improved

compiled by Esther Schindler

Apparently, a lot of software developers spent the Christmas holiday perfecting the new versions of their products. Take a look at the breadth of new and updated applications—from SmartSuite to utilities. And, as always, if you'd like to review an application, contact `reviews@possi.org` to find out what's involved.

ThermoProtect

David Wei's ThermoProtect 1.1 monitors a computer's health via a hardware health monitor chip.

ThermoProtect monitors three fan inputs, up to three temperature inputs, a whole load of different voltage inputs, and more. Its ThermoAlarm warns you if the fans and temperature go past your set tolerance, with both a graphical and audible warning. ThermoProtect is perfectly happy minimized in the background, and can warn a SysAdmin if server's fans or temperature is going wrong.

Why would you use this? Some users experience puzzling Trap E errors. Their machine worked perfectly under OS/2 before, and they haven't changed anything! Often, the problem is that the fans failed and the CPU temperature went straight through the roof.

For normal users, ThermoProtect is an extra layer of insurance, at little CPU and memory consumption. That's especially true for power users who demand every bit of computational power out of their computer, and use overclocking. The CPU is even more sensitive to higher temperature when overclocked; ThermoProtect will tell you if your current cooling solution is enough, and warn you if anything goes wrong.

Currently supported chips are Winbond W83781D and National Semiconductor LM78/79.

ThermoProtect is free. The author (`davidwei@cybermail.net`) requests a donation to charity from commercial users. The file is at `hobbes.nmsu.edu/pub/os2/util/mboard/tp-110.zip`.

SmartSuite for OS/2 Warp 4 1.1

As you may know, SmartSuite for OS/2 Warp 4 contains the five primary suite applications: Word Pro for OS/2 Warp 4, 1-2-3 for OS/2 Warp 4, Freelance Graphics for OS/2 Warp 4, Approach for OS/2 Warp 4, and Organizer for OS/2 Warp 4. The entire suite has been updated.

Among the highlights:

- Microsoft Office 97 filters are now available in 1-2-3 and Word Pro. The File/Open and File/Save functions in 1-2-3 and Word Pro maintain as much data and functionality as possible.
- SmartSuite for OS/2 Warp 4 Release 1.1 is designed to be year 2000-ready.
- You can insert the Euro symbol into any SmartSuite for OS/2 Warp 4 application, Release 1.1, if you are using FixPak 6 or higher, a code page that supports the Euro symbol, and a font that contains the Euro symbol.
- Installing in WorkSpace On-Demand 2.0 is different than installing on a file server. Complete instructions for installing Release 1.1 in the WorkSpace On-Demand 2.0 environment are now available.

For more information, visit `www.lotus.com/smartsuiteos2`.

Zoc Release 3.11

EmTec Innovative Software released ZOC 3.11. With ZOC, the Swiss army knife of communications programs, you can transfer data via modem, telnet connections, named pipes, Unix rlogin, TAPI modems and secure shell (SSH) connections.

Designed with the corporate user in mind, ZOC is capable of emulating a wide variety of protocols. All popular file transfer protocols are supported as well. Support for internal ISDN cards is available through an optional ISDN module. The ISDN module is not required for external ISDN modems.

The most powerful new feature is support for Secure Shell (SSH) logins. SSH allows the user to connect to an internet/intranet host using encryption for all data, making it practically impossible for third parties to tamper with or monitor the connection. ZOC with SSH protects against a number of potentially damaging attacks, including IP and DNS "spoofing," and the interception and manipulation of data by people controlling intermediate hosts. Using SSH, when you log in to remote accounts ZOC negotiates an encryption method with the host. SSH can be used manually, or in conjunction with predefined entries in ZOC's phone book.

ZOC uses REXX as a scripting language, allowing automation of functions that otherwise would have to be performed manually. ZOC also uses Dynamic Data Exchange (DDE), allowing other programs to execute ZOC-commands remotely. While REXX Programs must run under ZOC's control, separate applications can send requests to ZOC for processing. DDE support allows ZOC to act as a communication server.

ZOC is available at the EmTec Web site (`www.emtec.com`) as well as BMT Micro.

A fully functional demo is available. A single OS/2, Windows 95, or Windows NT license is $71. A comprehensive 130 page manual is sold separately.

Assistant/2

Assistant/2, the successor of Extended Clipboard/2, is a Workplace Shell extension to make work with OS/2 more comfortable in various ways.

EClip offers new and improved functions to use the clipboard more efficiently. With EClip, you can copy all needed clips into the clipboard first, then paste them into the destination application later.

With Assistant/2 you can drag and drop pieces of text from one application to another. If you drop text on the desktop, Assistant/2 creates a clip object compatible with Extended Clipboard. If the dragged text is a URL, it can create a URL object.

Keyboard and mouse events can be recorded with the integrated macro recorder. Because macros are special text clips, everything that you can do with text clips is also applicable to macros. Dynamic macros can generate macros at runtime, such as inserting the current date into an application or changing the case of selected letters. Other macros are included.

Hotkeys can be assigned to clips and macros. Mouse buttons and Win keys can be used as hotkeys, too.

English and German versions are included. Registrations for Extended Clipboard/2 are valid for Assistant/2. Contact the author, Hinnerk Becker (`hbecker@bigfoot.com`), or download the file from BMT Micro.

VClassed

Daniele Vistalli, an Italian student at Politecnico of Milan, released VClassed 1.16. VClassed is a simple, small utility that allows OS/2 power users to manage registration, deregistration, and generic handling of WPS classes. You can create object instances of registered classes, with object destination, parameters and title support, and view the existing registered classes.

It's free, released under the GNU GPL. Source code is available, at `www.quasarbbs.com/Virusface`.

WarpZip updated

WarpZip v2.1 is a zip file and OS/2 packed file unarchiver which takes the work out of downloading software. It handles the details, from the first click in your browser to the archives' final resting place. Beneath WarpZip's pleasant interface you will find plenty of revolutionary and powerful functions that will save both time and effort and boost your productivity.

Registration: $29. Available at BMT Micro.

Tyra/2 updated

Tyra/2 is an OS/2 config.sys editor. All the esoteric commands are presented in a logical format, plus you don't have to worry about spelling correctly or writing parameters. Just about everything is done with a mouse click. Also included is help text for all commands.

Registration: $25. Available at BMT Micro.

Templeton updated

Templeton is a powerful World Wide Web mirroring and copying tool. Using Templeton, you can bring remote web sites to your local hard drive for fast, convenient, reliable, off-line use.

Templeton essentially takes a "snapshot" of the desired web site, including links and images. When it's done, you have a complete copy of the web site with working hyperlinks and inline images! Templeton also provides a Web map detailing which links are contained on each page.

You can prevent Templeton from retrieving "too much," by limiting the retrieval. Templeton supports host limitations ("don't leave this web server"), depth limitations ("don't follow more than four links"), path restrictions ("don't leave the archive directory"), and user specified restrictions ("don't retrieve any GIF files except the ones in the image directory").

You can specify everything from where to store files to which HTTP proxy server to use. Templeton is a text-only application with an easy-to-use interface. It also has a non-interactive setting, ideal for automated retrieval scripts.

Templeton is available as shareware and is currently released for OS/2, SunOS 4.1.3, Linux 1.2.13 (ELF), and SGI IRIX 5.3. The Windows 95 version is currently under development. All documentation is in HTML format.

Templeton is $30 (single machine), $35 (single IP address). Subnet pricing varies; contact developer with requirements. You'll find it at BMT Micro.

Freeware OS/2 compiler

Prolog Development Center (PDC), the developers of Visual Prolog, have released their full Professional product as freeware for home and educational use. Visual Prolog is a fully functional Prolog compiler which cross compiles GUI and text-mode programs for OS/2 and all flavors of Windows.

Also included are SCO Unix and Linux compilers for text-mode programs. You can write a GUI program under OS/2 and compiling it for Windows without any changes. You can even compile Win32 code under the OS/2 development environment, and run it on a Windows machine.

The freeware product is available on CD for a $30 media and handling charge (shipping included). PDC will post the product on their Web site, but it is 200+ Megs, so the disk is well worth it.

Any programs you develop while learning will remain fully functional when you choose to purchase the commercial license. The only difference is that the freeware version puts a freeware notice in your executable.

Have a look at their announcement at `www.pdc.dk/vip/vipinfo/freeware_version.htm`

HappyBox 1.0 is ready.

HappyBox 1.0 is a free utility to search for files or file content. It also serves as an OS/2 container, supports drag'n'drop, and makes a good companion to other file manage-

ment tools. It's at www.teleport.com /~donlim/computers/os2.html

PM Euro

Carsten Mueller (carsten.mueller@hamburg.roses.de) released PM-EURO 1.1, a freeware Euro-capable Currency Calculator for OS/2. It correctly converts between different currencies, allows adding and editing currency quotations, and has both German and English user interfaces. You can find it at www.hamburg.roses.de/~carsten.mueller or in the OS2AVEN forum on CompuServe.

Gifsicle

Gifsicle is a gif manipulation software that let you play with GIF animations and colors. Daniele Vistalli (dvistalli@tin.it) ported gifsicle 1.10 to OS/2.

You can find it in the English Project section of www.quasarbbs.com/Virusface.

DFSee

DFSee is a display, analysis and recovery tool for disks and filesystems. It started as an HPFS-tool for OS/2 in 1994. The new version, 2.82, displays and analyzes disk partition tables (like FDISK), and provides recovery features for HPFS, including UNDELETE and boot-record recovery. It displays information about FAT filesystems including VFAT, FAT32 and OS/2 EAs, but no specific recovery options are included.

You can also display information about NTFS boot-record, MFT structures and directories, and recover the NTFS boot-record when damaged.

DFSee's binary display mode allows analysis of any disk or file system structure. Limited editing is supported.

DFSee is a command-line and text-only utility. At the moment OS/2, Windows NT/95 and DOS versions exist, allowing use from bootable diskettes as well.

The software is availabe at www.fsys.demon.nl.

At the OS/2 BBS

Here's short and sweet descriptions of new software uploaded to the OS/2 BBS at www.os2bbs.com.

KOPF1.ZIP: Brain calculus trainer.

JPEG6B-E.ZIP: Independent JPEG Group library v.6b for OS/2. Runtime library and development kit with sample apps/utilities. For use with emx+gcc. Open-source freeware.

INIED080.ZIP: INIedit is an INI editor for binary OS/2 INI with integrated tools to compare ini files and search multiple files for a string.

IJGWY1_0.ZIP: InJoy Gateway for Cable Modems.

INETP130.ZIP: Inet.Mail Pro v1.3.0 for OS/2 is a full featured SMTP/POP3 server for the OS/2 environment. It features a Presentation Manager interface for all functions and has been designed to take advantage of OS/2's multitasking, etc.

IPS080B1.ZIP: InetPowerServer is a enterprise level multiprotocol Internet server supporting ftp, stmp and pop protocols. IPS run under OS/2 Warp or Windows NT.

HTML_TXT.ZIP: HTML_TXT ver 1.06 is a powerful HTML to text converter. Supports UL, OL, and DL lists; nested tables with auto-sizing of columns; hierarchical display of Hn headers; FORM elements, and more. Written in REXX, it also runs under Regina REXX.

HOTS11.ZIP: Hot Scroll 1.1—The *ultimate* Scrolling utility—Allows to scroll vertically and horizontally without Scroll Bars.

GOTCH145.ZIP: Captures either windows, window interiors, parts of the screen or the whole desktop and save them to disk or clipboard as a picture (OS/2 bitmap format). Serial capture and batch mode options.

WAVMIX11.ZIP: Simple command line 44.1khz stereo wav file mixer. This command line utility will do simple mixes of large 44.1khz stereo wav files.

AV30CU.ZIP: IBM AntiVirus/2 update

ELAPSED.ZIP: PM program that shows time in days:HH:mm:ss since OS/2 was started.

DCITU17A.ZIP: OS/2 PM app to allow serial port transfer of images from digital camera models: Kodak DC25, Kodak DC120, Kodak DC200, Kodak DC210, Agfa ePhoto, Epson PhotoPC, Nikon Coolpik, Olympus, Sanyo VPC/DSC, Sierra SD640 and Toshiba PDR-2.

CDTEST10.ZIP: CD-ROM Speed Test 1.0 thoroughly tests the reading speed of CD-ROM tracks for further critical use such as with a CD-R software.

NETREXX.ZIP: NetRexx 1.148 toolkit & compiler. NetRexx is a human-oriented programming language which makes writing and using Java classes quicker and easier than writing in Java. Compiler and utility classes, samples, and online documentation.

JPD087.ZIP: Java Pilot Desktop v0.87. The platform-independent solution for your Palm Pilot completely written in Java. Enables communication and data interchange with your Palm Pilot under OS/2 Warp, Windows, Linux, Mac, Unix, etc.

GS550*.ZIP: Ghostscript 5.50 (several files) An interpreter for the PostScript language, with the ability to convert PostScript language files to many raster formats, view them, and print them without Postscript.

PCD100R.ZIP: PopCD! is Pop Up CD-ROM Object Utility. When you insert a CD-ROM, PopCD! creates a CD-ROM object on your desktop and opens the object.

FileJet

FileJet 7.61 is a multi-platform file manager and editor for Windows NT/95/98, DOS, and OS/2. The new release includes many bug fixes and minor enhancements. The vendor did not supply any information on where to find the application, so your guess is as good as mine.

Enhanced E Editor

The Enhanced E Editor 1.10 is a 32 bit, multithreaded OS/2 PM text editor built with productivity in mind. Options once reserved for registered users are now available to everyone for a full taste of the editor's capabilities. Here are a few examples of what the Enhanced E can do that you may not see somewhere else:

Save or print selected text, save or append selected text to a temporary file, time-date-name-signature file insert, spawn new session, extensive drag and drop (open files, save or rearrange text), configurable autoSave, large (user limited) file history, find by keyword or line number, presentation mode, text to IPF conversion, mime conversion, built-in code template tool (add to ours or build your own templates), and plugin support (write your own plugins to work in the editor).

More information may be obtained and software downloaded from http://fm-net.com/pillarsoft or BMT Micro.

Choosing a display card for OS/2 and Linux

by Rhodes Hileman

This is a somewhat off-center report of the state of PC graphics cards. Even though this shopper has been involved with image processing systems for fifteen years, I have not studied the SVGA market for a decade.

I'm primarily an OS/2 user, followed by DRDOS6, Linux, and a bit of Windows NT4. I know almost naught of Windows 3.1, having chosen to avoid MS software ever since DRDOS4 showed up MSDOS 3.3. I've used Tseng Labs ET4000 graphics chips for the last decade, so I'm now dragging myself into the nineties, staring at the current market for 2D and 3D graphics processors, a blinking Rip Van Winkle. Clearly, I'm a late adopter.

I'm looking for a graphics chip set I can live with.

The specs

Here's my requirements:

- Under $300 for the card. This turns out to be the easy part.
- 1280 x 1024 x 256 at 70Hz refresh. No problem here.
- It must be good for CAD work. I don't care about game performance, but solids modelling, rendering, and fast vector drawing are required.
- It must work in four operating systems: OS/2, Linux, DOS, and Windows NT 4. This trims the list considerably.
- I prefer to buy from a solid company that will be around a while. This is tricky.
- I care about high performance in 2D first, and 3D after that. I'd like my choice to be among the top half dozen performers.
- I'd like to see modest power consumption considering the performance; no floor heaters, please.
- I want to see good reviews from CAD users.
- It would be nice if the driver takes advantage of my AMD K6-2 "3Dnow!" CPU chip.

Checking the research

TABLE 1. Mercury Research 11/19/98 report

Strong 3D chips (In Futuremark sequence)	Strong 2D chips (In Winmark sequence)
S3 Savage 3D	3DFX Banshee
3DFX Banshee	Nvidia Riva TNT
Nvidia Riva TNT	Matrox G200
Matrox G200	S3 Savage 3D
Nvidia Riva 128	Number Nine T2R IV
Intel i740	3Dlabs PERMEDIA II

TABLE 2. Mercury Research May/August 1998

3D chips	2D chips
3Dfx Voodoo Banshee	Matrox G200
S3 Savage 3D	3Dlabs PERMEDIA II
3Dfx Voodoo 2	Number Nine T2R IV
Matrox G200	S3 Savage 3D
Intel's i740	Nvidia Riva 128ZX

Mercury publishes a caveat at the beginning of their reports, stating that the numbers and rankings reflect the use of a "Windows Hardware Quality Environment" and the use of certain benchmark tests which have their own biases. The above rankings reflect this also, since their data is our source here. Beware.

Tom's hardware site sees the Nvidia Riva TNT as the strongest 3D chip for games, and shows results on games which differ from Mercury. See `www.tomshardware.com /releases/99q1/990105` for their comprehensive review of Riva TNT cards. Tom also asserts that all current graphics chips give equivalent performance in 2D, having reached some theoretical maximum.

What about the drivers?

Generally, OS/2 drivers have not caught up with the state-of-the-art chips. A close inspection of the OS/2 Device Driver Pak Online site shows that most of the drivers are for chips that were hot in 1997 or earlier. Of the chips which scored well in 1998, there are OS/2 drivers for:

- Matrox G200
- Intel i740
- 3Dlabs PERMEDIA II

Linux drivers for the current hot chips are more extensive. That's a virtue of open-source software. (cf. Red Herring, Feb 99, pg 48)

- S3 Savage 3D
- Nvidia Riva TNT
- Matrox G200
- Nvidia Riva 128
- Number Nine T2R IV
- 3Dlabs PERMEDIA II

Windows NT 4.0 drivers seem to be supplied for cards carrying all the chips in the two driver lists above. This is certainly true for the OS/2 list and is probably true for the Linux list. Of course, NT drivers are available for many other cards, excluded here for lack of Linux and OS/2 drivers. Intersecting the two lists reduces options to two:

- Matrox G200
- 3Dlabs PERMEDIA II

Note that these are the top two chips on the mid-1998 2D list above. Both chips made respectable showings in all tests. Of the two, the Matrox has the edge in performance in the 1998 Mercury Research tests.

The companies

As of Q2 1998, the two largest market shares belonged to ATI and S3, at just under one quarter each. Behind them, each with about 6% market share, were Intel, SIS, and Cirrus. Then at 5% each, Nvidia, 3Dfx, Matrox, NeoMagic, and Trident. How long have these chip and card makers been in business?

TABLE 3. How long in business?

Matrox	1976
STB	1981
Hercules	1982
Number Nine	1982
Elsa	1983
Cirrus	1984
ATI	1985
Trident	1987
S3	1989
Neomagic	1993
Nvidia	1993
3Dlabs	1994

Intel is a special case. Although it was founded before any of these companies, and invented the whole IC game, it did not get into the graphics chip market until recently. I believe the current i740 is their first entry.

The industry environment

The pace of power doubling for graphics chips is now almost twice the rate of Moore's law for CPUs, that is, about ten months instead of eighteen months. Graphics chips are now at about 8 million transistors and are moving from 0.35 to 0.25 micron processes. Making life even more rough, the recent entry of 3D into the algorithm design puzzle has raised development times substantially.

In 1989, design time for a graphics card was about four months, and a company could expect to sell it for two years. By 1995, the design time had risen and the product sales window had shortened, so they were equal at about seven months. This was the last year that a display card company could get by with one design team.

Today, it takes eighteen months to design a graphics card that will sell for about three months. At a six to one ratio, video companies must keep six design teams working in parallel to maintain cash flow. This puts a big advantage in the hands of larger companies with substantial capital.

News and rumors

S3, the previous market leader, lost a number of design wins in 1998 due to a slow introduction of their current 3D chip. ATI just squeaked by them, in market share, as a result. ATI's current top-of-the-line chip, the "Rage Pro Turbo," is reported to run hot and is being redesigned for cooler performance. Its performance numbers in tests were at the lower end of the chips in this report. Nvidia's Riva TNT is also reported to be toasty enough to require a chip fan.

3Dfx just swallowed card maker STB, giving them design control of a line of cards for their chips. Diamond Multimedia Systems Inc. ate Orchid/Micronics. Orchid cards continue to be supported as well as Micronics boards. In 1995, Diamond also ate Supra (modems) and SPEA (graphics). The 3D assets of Tseng were bought by ATI. The remains of Tseng were bought by Cellpathways.com. Cirrus Logic has dropped out of this market to focus on other products. Several other companies are (or will be) following suit.

Intel recently purchased Chips & Technologies for $420 million, and invested $24 million in Evans & Sutherland, which suggests it is getting serious about graphics. Since they have more capital than anyone else, they may be in the best position to take this market. In January's Red Herring, Gerry Liu of Trident sums it up, "Intel will push the high-end players into a very high niche and the mainstream players into the low end. It will then sit in the middle like a tornado."

Conclusions

It is not reasonable to expect much stability from any of today's players in this market. Whatever I buy today will not be around for long, and even the chip maker may be gone soon.

The price/performance for mid-range graphics cards reflects the tremendous pace of advances. In 1988, an Orchid Prodesigner II, running on the 16MHz ISA bus, supplied with an ET4000AX chip and 1MB of memory, yielded 1024x768x256 at 60Hz refresh, and acceptable 2D drawing speed. It cost about $250.

For that price today, I can buy *two* Elsa Gloria Synergy cards, running on the 133MHz AGP bus, supplied with the PERMEDIA II chip and 8MB SGRAM, yielding screens of up to 1920x1200x256 at 73Hz. And, if the specs on the web sites are to be believed—I haven't tried this yet—I can use them both at once, one AGP and one PCI, or two PCI, in the same system with dual screen drivers, giving me 3840x1200 dots!

The Matrox Millenium G200 is my first choice and fills all the requirements and preferences specified. Elsa's Gloria Synergy, based on the PERMEDIA II chip, comes in a close second. Both are available in AGP or PCI bus forms. Both cost under $150, loaded with 8MB. The Elsa and Matrox are said to work together in a two screen setup. I have ordered one of each, so I will soon find out.

If you're a big spender and you're about to pick up a 21 inch monitor, ask about the Matrox "SE" version of the Millennium, which will give you even more dots. It is only sold with the monitor.

Rhodes Hileman manages engineering development, documentation, and manufacturing for hi-tech startups. He was on the founding teams of Genigraphics GP Systems, Array Technologies, and Gigaoperations Corp., all involved with creating faster image processing systems. He now lives in Seattle. Web site: www.smsys.com

Join the Phoenix OS/2 Society

We're the largest international organization supporting OS/2 users, OS/2 software developers, and OS/2 friends. (Not even IBM can say that — they don't support OS/2 users!) When you become a member of the Society, you get:

- A subscription to our award-winning magazine, *extended attributes*
- Access to discounts and special offers to members
- Free access to our email listserv
- A chance to take part in various Society events
- The knowledge that you're not alone in a sea of Windows users

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